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	Filing Date		2002-01-10	
	First Named Inventor	MARANAS, COSTAS D.		
	Art Unit	1631		
	Examiner Name	CLOW, LORI A.		
Attorney Docket Number		P05468US01 - (2 OF 3)		

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/LC/	1	Karp et al., "EcoCyc: Encyclopedia of Escherichia coli genes and metabolism," Nuc. Acids Res. 27:(1)55-58 (1999).	<input type="checkbox"/>
	2	Kataoka et al., "Studies of hydrogen production by continuous culture system of hydrogen-producing anaerobic bacteria," Wat. Sci. Tech. 36:41-47 (1997).	<input type="checkbox"/>
	3	Kauffman et al., "Advances in flux balance analysis," Curr. Opin. Biology. London, GB, 14(5):491-496 (2003).	<input type="checkbox"/>
	4	Klamt et al., "FluxAnalyzer: exploring structure, pathways, and flux distributions in metabolic networks on interactive flux maps," Bioinformatics 19(2):261-269 (2003).	<input type="checkbox"/>
	5	Kompala et al., GT, "Cybernetic Modeling of Microbial Growth on Multiple Substrates," Biotechnol. Bioeng. 26 (11):1272-1281 (1984).	<input type="checkbox"/>
	6	Korotkova et al., "Poly-beta-hydroxybutyrate biosynthesis in the facultative methylotroph methylobacterium extorquens AM1: identification and mutation of gap11, gap20, and phaR," J. Bacteriol. 184(22):6174-6181 (2002).	<input type="checkbox"/>
	7	Krieger et al., "MetaCyc: a multiorganism database of metabolic pathways and enzymes," Nud. Acids Res. 32 (Database issue), D438-D4342 (2004).	<input type="checkbox"/>
	8	Lutz et al., "Creating multiple-crossover DNA libraries independent of sequence identity," Proc. Natl. Acad. Sci. USA 98 (20):11248-11253 (2001).	<input type="checkbox"/>
	9	Majewski and Domach, "Simple constrained-optimization view of acetate overflow in Escherichia coli," Biotechnol. Bioeng. 35(7):732-738 (1990).	<input type="checkbox"/>
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↓ /LC/	11	Menendez et al., "Presence of acetyl coenzyme A (CoA) carboxylase and propionyl-CoA carboxylase in autotrophic Crenarchaeota and indication for operation of a 3-hydroxypropionate cycle in autotrophic carbon fixation," J. Bacteriol. 181(4):1088-1098 (1999).	<input type="checkbox"/>

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/LC/	12	Methe et al., "Genome of <i>Geobacter sulfurreducens</i> : metal reduction in subsurface environments," <i>Science</i> 302 (5652):1967-9 (2003).	<input type="checkbox"/>
	13	Misawa et al., "Production of beta-carotene in <i>Zymomonas mobilis</i> and <i>Agrobacterium tumefaciens</i> by introduction of the biosynthesis genes from <i>Erwinia uredovora</i> ," <i>Appl. Environ. Microbiol.</i> 57(6):1847-1849 (1991).	<input type="checkbox"/>
	14	Moore et al., "Predicting crossover generation in DNA shuffling," <i>Proc. Natl. Acad. Sci. USA</i> 98(6):3226-3231 (2001).	<input type="checkbox"/>
	15	Moore and Maranas, "Modeling DNA Mutation and Recombination for Directed Evolution Experiments" <i>J. Theor. Biol.</i> 205(3):483-503 (2000).	<input type="checkbox"/>
	16	Mushegian and Koonin, "A minimal gene set for cellular life derived by comparison of complete bacterial genomes," <i>Proc. Natl. Acad. Sci. USA</i> 93(19):10268-10273 (1996).	<input type="checkbox"/>
	17	Nakamura and Whited, "Metabolic engineering for the microbial production of 1,3-propanediol," <i>Curr. Opin. Biotechnol.</i> 14(5):454-459 (2003).	<input type="checkbox"/>
	18	Oh and Liao, "Gene expression profiling by DNA microarrays and metabolic fluxes in <i>Escherichia coli</i> ," <i>Biotechnol. Prog.</i> 16(2):278-286 (2000).	<input type="checkbox"/>
	19	Overbeek et al., "WIT: integrated system for high-throughput genome sequence analysis and metabolic reconstruction," <i>Nucl. Acids. Res.</i> 28(1):123-125 (2000).	<input type="checkbox"/>
	20	Palsson, "The Challenges of in Silico Biology," <i>Nat. Biotechnol.</i> 18(11):1147-1150 (2000).	<input type="checkbox"/>
	21	Papin et al., "Metabolic pathways in the post-genome era," <i>Trends Biochem. Sci.</i> 28(5):250-258 (2003).	<input type="checkbox"/>
/LC/	22	Papoutsakis, "Equations and calculations for fermentations of butyric acid bacteria," <i>Biotechnol. Bioeng.</i> 26(2):174-187 (1984).	<input type="checkbox"/>

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/LC/	23	Pennisi, "Laboratory Workhorse Decoded," Science 277:1432-1434 (1997).	<input type="checkbox"/>
	24	Pharkya et al., "Exploring the overproduction of amino acids using the bilevel optimization framework OptKnock," Biotechnol. Bioeng. 84(7):887-899 (2003).	<input type="checkbox"/>
	25	Price et al., "Genome-scale Microbial In Silico Models: The Constraints-Based Approach," Trends Biotechnol. 21 (4):162-169 (2003).	<input type="checkbox"/>
	26	Quackenbush et al., "The TIGR Gene Indices: analysis of gene transcript sequences in highly sampled eukaryotic species," Nucleic Acids Res. 29:159-165 (2001).	<input type="checkbox"/>
	27	Ramakrishna et al., "Cybernetic Modeling of Growth in Mixed, Substitutable Substrate Environments: Preferential and Simultaneous Utilization," Biotechnol. Bioeng. 52(1):141-151 (1996).	<input type="checkbox"/>
	28	Ramakrishna et al., "Flux-balance analysis of mitochondrial energy metabolism: consequences of systemic stoichiometric constraints," Am. J. Physiol. Reg. Integr. Comp. Physiol. 280(3):R695-704 (2001).	<input type="checkbox"/>
	29	Reed et al., "An expanded genome-scale model of Escherichia coli K-12 (JUR904 GSM/GPR)," Genome Biol. 4(9):R54 (2003).	<input type="checkbox"/>
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	31	SantaLucia Jr., "A unified view of polymer, dumbbell, and oligonucleotide DNA nearest-neighbor thermodynamics," Proc. Natl. Acad. Sci. USA, 95(4):1460-1465 (1998).	<input type="checkbox"/>
	32	Savageau, "Biochemical Systems Analysis," J. Theor. Biol. 25:365-369 (1969).	<input type="checkbox"/>
/LC/	33	Schilling and Palsson, "Assessment of the metabolic capabilities of Haemophilus influenzae Rd through a genome-scale pathway analysis," J. Theor. Biol. 203(3):249-83 (2000).	<input type="checkbox"/>

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/LC/	34	Schilling, et al., "Combining pathway analysis with flux balance analysis for the comprehensive study of metabolic systems," Biotechnol. Bioeng. 71(4):296-306 (2000).	<input type="checkbox"/>
	35	Schilling, et al., "Genome-scale metabolic model of Helicobacter pylori 26695," J. Bacteriol. 184(16):4582-4593 (2002).	<input type="checkbox"/>
	36	Schilling et al., "Toward metabolic phenomics: analysis of genomic data using flux balances," Biotechnol Prog. 15:288-295 (1999).	<input type="checkbox"/>
	37	Segre et al., "Analysis of optimality in natural and perturbed metabolic networks," Proc Natl. Acad. Sci. USA 99 (23):15112-15117 (2002).	<input type="checkbox"/>
	38	Segre et al., "From annotated genomes to metabolic flux models and kinetic parameter fitting," Omics, 7(3):301-316 (2003).	<input type="checkbox"/>
	39	Selkov, et al., "MPW: the Metabolic Pathways Database," Nucl Acids Res, 26(1):43-45 (1998).	<input type="checkbox"/>
	40	Stols and Donnelly, "Production of succinic acid through NAD(+)-dependent malic enzyme in an Escherichia coli mutant," Appl. Environ. Microbiol. 63(7):2695-2701 (1997).	<input type="checkbox"/>
	41	Sun, "Modeling DNA Shuffling," Ann. Conf. Res. Comp. Mol. Biol. Proc. Second. Ann. Intl Conf. Comp. Mol. Biol. p. 251-257 (1998).	<input type="checkbox"/>
	42	Supplemental European Search Report, EP 0379 2962 dated 4/11/2007.	<input type="checkbox"/>
	43	Supplemental European Search Report, The Penn State Research Foundation, EP 04 78 2168 dated 7-1-2009, 2 pages	<input type="checkbox"/>
/LC/	44	TIGR-Web site. TIGR microbial database <a href="http://www.tigr.org">http://www.tigr.org</a> (2009) (NOT AVAILABLE)	<input type="checkbox"/>

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/LC/	45	Tomita, et al., "E-CELL: software environment for whole-cell simulation," Bioinformatics 15(1):72-84 (1999).	<input type="checkbox"/>
/LC/	46	Tomita, "The E-Cell Project: Towards Integrative Simulation of cellular Processes," New Gen. Comput. 18:1-12 (2000).	<input type="checkbox"/>
/LC/	47	Torres et al., "An Indirect Optimization Method for Biochemical Systems: Description of Method and Application to the Maximization of the Rate of Ethanol, Glycerol, and Carbohydrate Production in Saccharomyces cerevisiae," Biotechnol. Bioeng. 55(5):758-772 (1997).	<input type="checkbox"/>
/LC/	48	Valdes et al., "Metabolic reconstruction of sulfur assimilation in the extremophile Acidithiobacillus ferrooxidans based on genome analysis," BMC Genomics 4:51 (2003).	<input type="checkbox"/>
/LC/	49	Varma and Palsson, "Metabolic Capabilities of Escherichia coli: II. Optimal Growth Patterns," J. Theor. Biol. 165:503-522 (1993).	<input type="checkbox"/>
/LC/	50	Varma and Palsson, "Metabolic Flux Balancing: Basic Concepts, Scientific and Practical Use," Biotechnol. 12:994-998 (1993).	<input type="checkbox"/>

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